REMARKS

This Response, submitted in reply to the Office Action dated September 20, 2010 is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Claims 1-19 are all the claims pending in the application.

I.   Rejection of claims 17-18 under 35 U.S.C. § 102

Claims 17-18 are rejected under 35 U.S.C. § 102(b) as being anticipated by Coss et al. (Coss hereinafter) (US Patent No. 6,170,012 B1). Applicant traverses the rejection.

For purposes of clarity in the record, Applicant request that the Examiner more particularly identify which element is being cited for teaching the claimed primary identifiers, parameterized rules, data comprising at least one parameter value, an existing one of the entries in said first table, and network data processing module.

Claim 17

Claim 17 recites:

A method of processing network data, comprising:

storing as entries in a first table, primary identifiers, each with one or more associated parameterized rules;

receiving data comprising at least one parameter value; and

making a determination whether said parameter value can be associated with an existing one of the entries in said first table;

when the determination is affirmative, making a combination of said parameter value and said associated parameterized rules, and communicating said combination to a network data

processing module so as to direct the management of network data by said network data
processing module;

wherein each of said associated parameterized rules is specified according to a string of
characters containing a place-holder for each parameter of said associated parameterized rule that
is not statically defined, wherein the place-holder is relevant to the rule.

The Examiner asserts that Coss anticipates the elements of claim 17. Fig. 3 of Coss

illustrates security policies that can be represented by sets of access rules which are represented

in tabular form and which are loaded into the firewall by a firewall administrator. In FIG. 3, the

categories "Source Host," "Destination Host" and "Service" impose conditions which must be

satisfied by data included in a packet for the specified action to be taken on that packet. See col.

4, lines 1-15.

The Examiner asserts that Coss teaches "receiving data comprising at least one parameter

value" in col. 4, lines 8-11 and 26-29. The aspects of Coss cited by the Examiner describe the

contents of the table of Fig. 3 and for a packet to satisfy a rule, each condition included in the

rule must be met. For example, with reference to FIG. 3, a packet from source host A to

destination host D and representing mail will be dropped under Rule 20. However, there is no

teaching or suggestion of <u>receiving data comprising at least one parameter value</u>.

Further, assuming the Examiner is citing the asterisk representing a wild card entry for

teaching the claimed parameter value, there is no teaching or suggestion of making a

determination as to whether said parameter value (asterisk) can be associated with an existing

one of the entries in said first table. Col. 4, lines 22-29 of Coss describes that in rule processing

for a packet, the rules are applied sequentially until a rule is found which is satisfied by the

packet (or until the rule table is exhausted, in which case the packet is dropped). For a packet to

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satisfy a rule, each condition included in the rule must be met. However, this does not teach or

suggest making a determination whether said parameter value (asterisk) can be associated with

an existing one of the entries in said first table.

Claim 17 further recites "when the determination is affirmative, **making a combination**

of said parameter value and said associated parameterized rules, and communicating said

combination to a network data processing module so as to direct the management of network

data by said network data processing module." The Examiner asserts that the step of caching the

results, as described in Col. 5, lines 35-48 of Coss, teaches this aspect of the claim. However,

there is no teaching or suggestion of making a combination of the asterisk (parameter value as

cited by the Examiner) and associated parameterized rules.

Claim 17 also recites "wherein each of said associated parameterized rules is specified

according to a string of characters containing a place-holder for each parameter of said

associated parameterized rule that is not statically defined, wherein the place-holder is relevant to

the rule."

Coss describes that when a category provided for in the rule table is irrelevant in a certain

rule, the corresponding table entry can be marked as a "wild card." This can apply to any one or

any combination of the categories. In FIG. 3 and elsewhere, an asterisk (*) is used for wild card

entries. However, the wild card does not specify a primary metarule. The wild card is used

when a rule in the table is irrelevant. As recited in claim 1, a primary metarule is specified

according to a string of characters containing a place-holder for each parameter of said primary

metarule that is not statically defined. The entries in the table of Coss do not teach or suggest the

claimed primary metarules which are in corresponding relationship to primary identifiers.

Therefore, Coss does not anticipate the elements of claim 17. Consequently, claim 17

should be deemed allowable.

To the extent claim 18 recites similar subject matter, claim 18 should be deemed

allowable for at least the same reasons.

II.   Rejection of claims 1-14 and 19 under 35 U.S.C. § 103

Claims 1-14 and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over

Coss et al. (Coss hereinafter) (US Patent No. 6,170,012 B1) in view of Bellinger et al (Bellinger

hereinafter) (US 2002/0169858).

Claim 1

Claim 1 recites "a first table storing sets of at least one primary rule, called "primary

metarules," **in a parameterizable form and <u>in corresponding relationship</u> to primary**

identifiers." The Examiner asserts that Coss, Fig. 3, col. 2 and 4, lines 37-41 and 1-6, teaches

this element of claim 1 because Coss discloses dynamic rules which values can be modified.

Coss describes that a computer network firewall may make use of dynamic rules which

are added to a set of access rules for processing packets. The dynamic rules allow a given rule set

to be modified based on events happening in the network without requiring that the entire rule set

be reloaded. Exemplary dynamic rules include a "one-time" rule which is only used for a single

session, a time-limited rule which is used only for a specified time period, and a threshold rule

which is used only when certain conditions are satisfied. Further, Coss describes that

security policies can be represented by sets of access rules which are represented in tabular form and which are loaded into the firewall by a firewall administrator. The table can provide for categories including rule number, designations of source and destination hosts, a designation of a special service which can be called for in a packet, and a specification of an action to be taken on a packet.

However, there is no teaching or suggestion that the dynamic rules or the categories in the table (which the Examiner asserts teaches the claimed primary metarules) are in **parameterizable form and are <u>in corresponding relationship</u> to primary identifiers.** Fig. 3 of Coss illustrates a table including a rule number, designations of source and destination hosts, a designation of a special service which can be called for in a packet, and a specification of an action to be taken on a packet. However, there is no teaching or suggestion that a rule number is in a parameterizable form, or that the rule number is <u>in corresponding relationship</u> to a primary identifier. See, for example, page 15, line 21-page 16, line 9, of the Applicant's originally filed specification for further clarification.

Claim 1 further recites "management means which is coupled to control means of said data processing server and, **on receipt of <u>auxiliary data representing operating parameters</u> <u>that request reconfiguration of the control means,</u>** the auxiliary data delivered by said control means after reception by the data processing server of secondary data **that <u>requires</u> <u>reconfiguration of the control means,</u>** selects at least one of the primary identifiers in the **first table and <u>associates said auxiliary data therewith so as to define dedicated processes of</u> <u>said control means</u>**."

The Examiner asserts that col. 4, lines 3-6 and col. 5, lines 35-46 of Coss teach this

aspect of the claim.   Coss describes a firewall can be configured to utilize "stateful" packet

filtering which stores in a cache the results of rule processing as applied to one or more packets.

Stateful packet filtering may be implemented by caching rule processing results for received

packets, and then utilizing the cached results to bypass rule processing for subsequent similar

packets. For example, the results of applying a rule set to a packet of a given network session

may be cached, such that when a subsequent packet from the same network session arrives in the

firewall, the cached results from the previous packet are used for the subsequent packet.

Therefore, Coss merely describes applying cached results to packets. There is no

teaching or suggestion of auxiliary data representing operating parameters that request

reconfiguration of the control means is received. Specifically, there is no teaching or suggestion

of reconfiguring the control means.   Further, for purposes of clarity in the record, Applicant

requests that the Examiner more particularly identify which element of Coss is being cited for

teaching the claimed control means and auxiliary data.

Claim 1 further recites "wherein said at least one primary metarule is specified according

to a string of characters containing a place-holder for each parameter of said primary metarule

that is not statically defined." The Examiner asserts that col. 4, lines 15-21 of Coss teaches this

aspect of the claim.

Coss describes that when a category provided for in the rule table is irrelevant in a certain

rule, the corresponding table entry can be marked as a "wild card." This can apply to any one or

any combination of the categories. In FIG. 3 and elsewhere, an asterisk (*) is used for wild card

entries. However, the wild card does not specify a primary metarule. The wild card is used

when a rule in the table is irrelevant. As recited in claim 1, a primary metarule is specified

according to a string of characters containing a place-holder for each parameter of said primary

metarule that is not statically defined. The entries in the table of Coss do not teach or suggest the

claimed primary metarules which are in corresponding relationship to primary identifiers.

The Examiner states that Coss does not teach request for reconfiguration of the control

means and cites Bellinger to cure the deficiency. However, Bellinger does not cure the

deficiencies of Coss disclosed above. Further, Bellinger discloses:

> Each service request, for both registration and
> activation, is sent via XML from the Service Provider's
> portal server to the central controller. The controller
> interprets the request by passing the service parameters
> through the pre-defined rules associated with the Service
> Offering and stored in the LDAP directory. These rules
> could be as simple as sending a configuration request to a
> Firewall to allow or deny access to specific ports, or it
> could be more complex as in the case of an Application
> Service where the central authority may have to pass access
> information to the application server, set up a VPN between
> the user and application server, punch through a firewall
> and modify the available bandwidth and QoS to the user.

However, contrary to the Examiner's assertions, there is no teaching or suggestion of

auxiliary data representing operating parameters that request **reconfiguration of the control**

means, as claimed.

Therefore, claim 1 and its dependent claims 2-8 and 19 should be deemed allowable.

To the extent claims 9, 15, 17 and 18 recite similar subject matter, claims 9, 15, 17 and

18 and dependent claim 16 should be deemed allowable for at least the same reasons.

Claim 13

Claim 13 recites, *inter alia,* "wherein there **are executed in parallel** the selection of the **primary or secondary metarules** in the **first table** and the modification of the auxiliary data in the **second table** associated with the secondary identifier representing the selected primary or secondary metarules."

Coss describes that dynamic rules allow a given rule set to be modified based on events happening in the network and dynamic rules include a "one-time" rule which is only used for a single session. However, there is no teaching or suggestion of the selection of the **primary or secondary metarules** in the **first table,** or of the modification of the auxiliary data in the **second table** associated with the secondary identifier representing the selected primary or secondary metarules, let alone, executing the selection and modification in parallel.

Therefore, claim 13 should further be deemed allowable.

III.   Rejection of claims 15-16 under 35 U.S.C. § 103

Claims 15-16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Coss et al. (Coss hereinafter) (US Patent No. 6,170,012 B1) in view of Antur et al. (Antur hereinafter (6,243,815). To the extent claim 15 recites subject matter similar to independent claims 1, 9, 17 and 18, claim 15 and dependent claim 16 should be deemed allowable for at least the same reasons set forth above. Moreover, Antur does not cure the deficiencies of Coss.

IV.   Conclusion

In view of the above, reconsideration and allowance of this application are now believed

to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is

kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue

Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

overpayments to said Deposit Account.

Respectfully submitted,

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